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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,142	10/09/2003	Hisashi Ieda	4041O-000020	1343

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EXAMINER

FORD, JOHN K

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/682,142		IEDA ET AL.	
	Examiner		Art Unit	
	John K. Ford		3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/24/06
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10, 11 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 6-9 is/are rejected.
- 7) ☒ Claim(s) 2, 4, 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application (PTO-152) |
| 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) ☐ Other: _____ |

Applicant's response of January 24, 2006 has been carefully considered. In a nutshell, applicant argues that because Takenaka '809 does not teach the step-wise air mix door adjustment in the type of system disclosed by Ieda '540, that it would not be obvious to have combined their respective teachings. The examiner is at a complete loss to understand why not. Tanaka discloses a system for preventing sudden changes in discharge temperature resulting from sudden changes in air-mix door position (by forcing the air-mix door to move to its target position in a series of steps rather than abruptly). That disclosure is made regardless of the cause of the abrupt change. There is nothing in Takenaka '809 that limits the step-wise air mix door adjustment to any particular cause. Takenaka '809 merely keeps the temperature from abruptly changing regardless of the cause. Engineers at Denso have long known that standard on-off compressor control in car air conditioners produce abrupt temperature changes. See the paragraph spanning col. 8 and 9 of Denso's USP 4,482,007, incorporated by reference here. The same logic would pertain to a heater core that is abruptly switched on or off. It is also very clear from the top parts of Figures 10A and 10B of applicant's disclosure, illustrating the performance of Ieda '540, that despite the advantages touted by Ieda '540, his system has abrupt changes in discharge temperature caused by abrupt changes in the air-mix door position. That is precisely the problem that Takenaka addresses and for exactly the same reasons that applicant discloses (i.e. that the abrupt changes in air temperature are perceived by the occupants as uncomfortable). The argument appears to be hinging on the notion that Takenaka '809 should have anticipated the invention (by listing situations in which it would be a good

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idea to make the air-mix door move in a step-wise manner) of Ieda '540 in his disclosure. Since Takenaka '809 was invented some fifteen years prior to Ieda '540, it is unreasonable for applicant to assume that Takenaka was going to address in his disclosure a system that had not yet been invented and that was still some fifteen years into the future. The point is that Ieda '540 will function to keep the ~~occupants~~ comfortable regardless of the condition that produces the abrupt change by limiting the ability of the air-mix door to respond too quickly to any abrupt change in condition.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 6, 7, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Ieda et al (US 2002/0134540) and Tanaka et al (US 4,899,809).

Ieda, cited by applicant and applicant's own prior invention discloses all of the claimed features (which the examiner will not attempt to explain here, given applicant's obvious familiarity with the subject matter of Ieda '540) except the controller that "gradually" changes the position of the air-mix door so that the passengers do not experience discomfort associated with a sudden change in discharge temperature.

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Tanaka discloses a system that gradually changes the position of the air-mix door so that there are no sudden changes in the discharge temperature and thereby ensures occupant comfort. See col. 1, lines 35 - 60 of Tanaka, incorporated here by reference. To have provided Ieda with a system to gradually change the position of the air mix door to reduce the occupant discomfort associated with quick changes in temperature would have been obvious to one of ordinary skill in the art. The Examiner's discussion above is incorporated here by reference.

Claims 2, 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 10 and 11 are allowed.

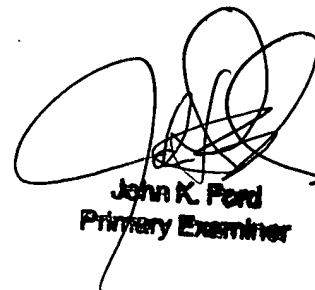
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to John K. Ford at telephone number 571-272-4911.



John K. Ford
Primary Examiner